# **Game Based Learning for Spanish 101**

Action Research

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## **Introduction and Problem Statement**

Everyone loves games, but not everyone has a love for learning. Why not blend the two and see if more students are interested in learning? That's exactly what I plan to do. Learning another language can be difficult, after all it's foreign to the students. If students find the learning experience to be fun, will students be more likely to continue their studies? I think so. The possibility of sparking an interest of furthering a student's studies is a sound reason to pursue such a study.

My passion for other cultures and learning about other cultures spurs my desire to find a way to bring fun into the learning experience for online students learning Spanish 101. Students in the Spanish 101 course are initiating their journey into a life long learning experience of the Spanish language. Would a game learning environment attract students to learn Spanish? Would such an environment keep students interested during the semester?

Last year I conducted a research project on connecting students between two universities: one in the Midwestern United States and one in Central Mexico. In that study, the students discussed the topic of diversity after having read the same articles. The instructor involved in Mexico is interested in connecting students again in the future.

In another study, I assisted three faculties in connecting their students. Three universities were involved: two in the Midwestern United States and one in Central Mexico. The courses involved teaching a language as a second language; all students were teachers or wanted to teach.

The current study was modified based on the experience of the prior informal studies in the following ways: the prior studies were focused on discussions and this study will be focused on creating the online section which may include discussion.

# **Purpose and Intended Audience**

The purpose of this research is to: (1) show that I can perform research and investigate a topic in order to graduate in the Master's of Spanish at the University of Colorado Denver; and (2) to research creating a game based learning environment for Spanish 101.

The intended audience is: (1) faculty committee for my Spanish thesis; (2) other faculty members interested in creating a game based learning environment for language courses; (3)my colleague in Central Mexico with whom I plan to co-author research articles regarding the research performed on the topic of virtually connecting peers; and (4) board of faculty for entrance into doctorate program in Boulder where I hope to continue my research on virtually connecting students from the U.S. and students from Mexico.

# **Research Questions**

Would a game based learning environment retain more students and thereby reduce the dropout rate of students?

Would a game based learning environment increase the number of students who take the 2nd level of Spanish?

Would students in a game based learning environment have higher grades scores than a traditional online course?

## **Context of the Study**

I will survey students on how they feel about a game based learning environment. I will also look at the grades of the students and see what topics are more difficult for them. During this portion of my study, I will review the content of the book to teach Spanish in order to brainstorm about what activities can re-created online. We will be using the assigned book for the course.

I will take a course on course on creating Game Based Learning Environments so that I can build a successful course. I will build another game based learning environment for the course that I teach now at a U.S. Midwestern college. This will help me build experience for this project.

By the fall semester, I hope to have an online course ready to be tested. During the fall semester, I will survey students to see how they feel about the game based learning environment. At the end of the semester, I will compare the grades with the on campus students to the online students. After the study, I will make any necessary changes to the course as needed.

## **Procedures**

The following sections will be the procedures for the research:

- Site selection and sampling
- Data collection instruments
- Data analysis plans
- Schedule
- Ethical procedures
- Impact
- Checks for rigor

## Site selection and sampling

Students will participate in the game based learning environment. The data samplings will be student work, student grades, student retention rates, and the game based learning environment.

#### **Data collection instruments**

Students will be surveyed at the beginning of the course and once again at the end of the course. The survey will contain Likert-scale questions in addition to open-ended opinion questions. Both surveys will be anonymous and participation will be optional.

The student work will be analyzed to see how the successful the students are. Students will be surveyed at the end of the course to see if the students will continue their Spanish studies and if they would if there was an online section available. The online student rate of retention (number of students who continue on to the 2nd level of Spanish) after the course will be compared to the on campus student rate.

## **Data analysis plans**

Data will be analyzed from the current study and compared to the results of the previous study. The discussion board will be analyzed through categorization and coding as described by Koshy.

Research Question	Primary Data Source
Would a game based learning environment retain more students and thereby reduce the dropout rate of students?	Beginning survey, Ending survey, Retention rates, dropout rates
Would a game based learning environment increase the number of students who take the 2nd level of Spanish?	Beginning survey, Ending survey, Retention rates
Would students in a game based learning environment have higher grades scores than a traditional online course?	Beginning survey, Ending survey, student grades

#### **Schedule**

The following schedule will be followed for the research:

Action	Time Frame Fall 2012- Winter Break
Invite faculty to faculty thesis board	Late Fall 2012
Select courses to observe	Winter break
Create surveys for students	
Take Game Based Learning course online	Spring 2013
Review current lesson plans and rubrics	
Notify students of observation	
Decide what will be observed	
Complete Draft of Action Research Proposal with Data Collection Methods	Winter Break
Receive feedback on Draft of Action Research Proposal with Data Collection Methods	Spring 2013
Draft email to students; finalize survey questions	

Action	Time Frame Summer 2013
Update Action Research Proposal with Data Collection Methods	May 2013
Survey students at start of course in the spring	
Conduct literature review on games and attention span	
Create prototype for game	by end of Summer 2013
Survey students at end of spring semester	May 2013
Write Draft Literature Review	June 2013
Receive feedback on literature review	June 2013

Complete Final Draft Literature review	July 2013
Collect data from surveys and observations	July 2013
Compile & Analyze data	July 2013

Action	Time Frame Fall 2013- Winter Break
Receive feedback and update as needed for data analysis and literature review	Fall 2013
Create game	August 2013
Run course	Fall 2013
Collect data from live course	Winter break 2013
Compile & Analyze data	Winter break 2013
Complete Data Analysis	Winter break 2013
Draft of Action Research Report	Winter break 2013
Complete Final Action Research Report	Spring 2014

## **Ethical procedures**

All participation in online course will be was compulsory. All data received from the student grades, student work, and surveys will remain anonymous. Participation in the surveys in English (all students will have near native English skills) will be voluntary and a statement of consent of the use of the data from the survey will be provided to the students before they complete the survey. The surveys enable the students with the opportunity to share their opinion on the their experience in the online course. Students will be asked to complete a consent form granting permission or denying permission to use the data collected from the student work and student grades while keeping anonymity of the students.

No names of the student participants will be shared at any point, although the instructor knows the students names. The name of the university and the name of the instructor are confidential.

## **Impact**

Student assignments will be connected to the assigned Spanish text, similar to the on campus sections. Students will be required to complete the same assignments and work as the on campus sections. This similarity will help minimize the impact on their coursework.

## **Checks for rigor**

As the researcher, I would be creating a blog during the interaction to discuss my thoughts of how the study is taking place. With this *persistent observation*, I would be able to analyze the study not just from memory, but from my notes, and from the student work (Stringer, 2007).

During the research, I will evaluate what is *transferable* to future studies and online sections (Stringer, 2007). Not every aspect of the study will apply to future courses, but I hope to find aspects of the study that can be transferred to future studies.

Multiple sources will be utilized in the literature review and the data will be compared against the prior studies from Spring 2011 and Fall 2010. This satisfies the *triangulation* as described by Stringer (Stringer, 2007).

The research will have *confirmablility* in that the instructor will have access to the data at all times and will document her findings of the study (Stringer, 2007).

The viewpoints of both the students in the online section and the on campus sections will be considered equal and therefore will be a *diverse case analysis* as described by Stringer (Stringer, 2007).

## **Summary**

This research is a continuation of a research project I started back in fall of 2010 and continued in Spring of 2011. Initially I conceptualized that students would have a strong desire to connect with their peers internationally, like I did. I also perceived that setting up the connection and assisting with the discussion would be similar to setting up a discussion as normal. What I found in the Fall of 2010 was that it was a much harder project and that the students didn't appreciate just being connected.

The prior project in I performed helped me realize that the students needed more structure in their connection, a better tool for the connection, and a solid purpose for the connection. Similar to a team agreement, an agreement needs to be setup between the instructors involved as a form of a contract so that both instructors understand the connection that is taking place and to help enforce a timeline as needed.

The study in Spring 2011 showed more progress. The discussion was more structured, the tool was tested and was one that I have utilized as a student, and the students have a solid purpose for the discussion: to discuss diversity and community based learning according to readings already selected. Students showed that they were interested in learning about their peers and showed a desire to connect.

The current study deals more with online learning and a small portion of connecting the students in an online discussion. The online discussions will help to connect the students with native speakers and language learners. The remainder of this study will be new as I have not compared game based learning online to on campus courses previously.

Before I continue, I would like to define my role as a researcher and explain my abilities to research this topic are relevant to my field. I was a Master student in the eLearning department at the School of Education, thus why I was and still am so heavily involved with eLearning and virtual tools. My studies provided me with exposure to various eLearning tools and enabled me to see tools in action before utilizing them in classrooms with students. My undergraduate was in International Studies, thus explaining somewhat my interest in Intercultural competency, but more emphasizing the need to to virtually connect with international peers. In my youth, I loved video games and often competed with my brother to see who could finish the game faster. I am a student in the Spanish Master program, thus why I am focused on Spanish. Currently I am an online teacher for a U.S. Midwestern community college, thus why I am interested in teaching Spanish.

I am the right person for this research topic because I have a passion for eLearning, teaching, intercultural competence, gaming, and connecting students with their international peers. In my final semester of my Master's in Information and Learning Technologies, I took a research course that guided me through my research in Spring 2011. Although I am still fairly new to research, this research is my thesis for my Spanish Master's and I have a faculty board that will be my scholarly support to assist me through all the necessary stages of research.

#### References

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